

Remarks

Reconsideration and further examination are requested.

a. Disposition of the Claims

Claims 16-53 are pending.

Claims 16-35, 38-40, & 53 are rejected.

Claims 36-37 & 41-52 are withdrawn and kept as a reminder to pursue a divisional.

b. Specification

The present amendment addresses the concerns about the cross-reference to related applications. Office action, para. 3. Thus, this objection should be withdrawn.

c. 35 U.S.C. § 112, para. 1 (Written Description)

Claims 16-35, 38-40, & 53 are rejected as lacking a written description. Office action, para. 4. More specifically, the rejection asks Applicants to identify support for H, In, Sb, Al, Ni, Si, and Ge. Office action, para. 4. In response, Applicants direct the Examiner to paragraph 64 of the as-filed specification, which paragraph recites the elements. Thus, this rejection should be withdrawn.

d. 35 U.S.C. § 112, para. 1 (Enablement)

Claims 16-35, 38-40, & 53 are rejected as lacking an enabling written description, because “the claims recite elements [namely, H, In, Sb, Al, Ni, Si, and Ge] “that are not disclosed in the specification.” Office action, para. 5. It is believed that this rejection is the same as the previous written description rejection, which Applicants addressed by directing the Examiner’s attention to paragraph 64 of the as-filed specification. In addition, Applicants direct the Examiner’s attention to Example 1, paragraph 129; Example 10, paragraph 169; and Example 15, paragraph 174 of the present specification, which Examples show ITO, copper doped nickel zinc ferrite, and silicon carbide. Thus, this rejection should be withdrawn.

Claims 16-30, 32-35, & 38-40 are rejected as lacking an enabling written description, because combusting is essential to making a compositionally uniform product in which a dopant is present and the specification offers no other method other than combusting. Office action,

para. 6. The Examiner noted that the present specification teaches that the process must be “sufficiently fast,” but then goes on to state that the specification offers no other non-combusting process. Office action, para. 6. The same specification cited by the Examiner stated that U.S. Pat. No. 5,851,507 is such a “sufficiently fast” method. Moreover, Applicants informed the Examiner about the ‘507 patent, see Response filed 12-20-2007, starting at p. 9, section B, but why the Examiner disregards the ‘507 patent’s teachings is absent from the record. Along these lines, and by way of a not doped example, the Examiner is directed to Example 11, paragraph 170 of the present specification, in which Zn (not doped) is made using a convergent-divergent nozzle, which is not combusting. Thus, this rejection should be withdrawn.

e. 35 U.S.C. § 112, para. 2 (Indefinite)

Claims 16-35, 38-40, & 53 are rejected as indefinite for three reasons, each of which is addressed under a separate header.

high temperature processing

Claims 16 & 26 are rejected for reciting *high temperature processing*, because it is not understood how a mixture of a metal compound and a dopant can form a “compositionally uniform” nanopowder by just heating. Office action, para. 7. To the contrary, the ‘507 patent and the ‘997 patent of record are two methods. The Examiner is also directed to the present specification, page 36, paragraphs 115-118. Furthermore, “how to” questions are irrelevant to whether or not one of ordinary skill in the art would have been reasonably apprised of the claim’s scope. An indefiniteness analysis is not an invitation to pick apart claim terms outside the context of the claims as a whole. Here, the cited term is part of a larger term, *producing via high temperature processing a nanoscale powder form*.... Even if it were possible to heat without *producing ... a nanoscale powder form*, one of ordinary skill in the art would still be reasonably apprised of when *high temperature processing* would produce *a nanoscale powder form*....

Along these lines, relative terms do not automatically render the claim indefinite under 35 U.S.C. § 112, second paragraph. M.P.E.P. § 2173.05(b). Here, the Examiner’s position results from improperly picking apart the claim out of context. Applicants submit that the claims themselves would have reasonably apprised one of ordinary skill in the art of their meaning.

And if the claims themselves were not enough, "[a]cceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification." M.P.E.P. § 2173.05(b) (relative terminology). The Examiner is directed to the present specification, page 36, paragraphs 115-118. Applicants submit that the claims themselves, further supported by the specification, would have reasonably apprised one of ordinary skill in the art of their meaning. Thus, the present rejection should be withdrawn as to this ground.

Heating

Claim 20 is rejected, because it is unclear where the heating step fits in with the process Office action, para. 7. The Examiner is directed to the antecedent recited in claim 20, i.e., wherein creating a composition of matter.... Thus, the present rejection should be withdrawn as to this ground.

Quench step

Claim 23 is rejected, because it is unclear where the quench step fits in with the process Office action, para. 7. The Examiner is directed to the antecedent recited in claim 23, i.e., wherein creating a composition of matter.... Thus, the present rejection should be withdrawn as to this ground.

The remaining claims

The remaining claims are rejected as being depending on other claims or being rejected for substantially the same reasons as the claims more fully discussed above. As to these claims, it is submitted that the responses above address each rejection, which should be withdrawn using the reasoning above.

f. 35 U.S.C. § 102(e)

Claims 16-35, 38-40, & 53 are rejected as anticipated by Bickmore. Office action, para. 8. A reference can anticipate a claim if the reference describes each and every element as set forth in the claim. M.P.E.P. § 2131. Here, the Examiner cited two passages.

FIG. 1 presents the approach of this invention. The process begins by preparing solutions or suspensions of metals desired in the complex composition. For example, if a doped complex of composition $d_1M_1M_2X$ is desired, then according to the invention, one should prepare solutions or suspensions of dopant d_1 , metals M_1 and M_2 , and anion X , where M_1 and M_2 are selected from the s, p, i, and d groups of the periodic table, and X is selected from the p group of the periodic table. Solutions or suspensions may be prepared, for example, by mixing solutions containing each of the constituent elements of the desired powder. Elements d_1 , M_1 , and M_2 are selected from the group consisting of the s group, p group, d group, or f group of the periodic table, and X is selected from the group consisting of carbon, nitrogen, oxygen, boron, phosphorus, sulfur, chalcogens, and halogens.

should be withdrawn.

3. Conclusion

It is believed that the present application is in condition for allowance. Favorable reconsideration of the application is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

If a petition for an extension of time is required, then one is requested. The Director is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16-1.17 & 1.21(m) (including deficiencies in payment) which may be required, or credit any overpayment to Deposit Account No. 50-4028.

Respectfully submitted,

Dated: 2008-07-17

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The first (col. 3, left) identifies "[s]olutions or suspensions" which is neither explicitly nor inherently a step as recited in the present claims. The second (col. 5, ll. 27-50, not shown) is a generic description, which is neither explicitly nor inherently a step as recited in the present claims. Bickmore does not describe the method of the present invention and thus, the present rejection